

Surface Water Disposal Maintenance Plan

Project:

Conwy Close, Tilehurst, Reading. RG30 4BZ

1.0 Why is a maintenance plan needed?

- 1.1 Regular maintenance is required to ensure that the surface water drainage system operates efficiently and does not cause flooding to the property or surrounding buildings and land.
- 1.2 Such work is part of the day-to-day responsibility of all owners and occupiers.
- 1.3 Maintenance is most effective when carried out regularly, on a planned cycle.
- 1.4 Good maintenance needs the regular investment of small amounts of time and money, but the cost of preparing and carrying out a planned maintenance programme should be far less than the costs resulting from a series of unplanned major repairs, and will help plan future financial commitments.

2.0 What is maintenance?

- 2.1 Maintenance is the routine work which is necessary to protect the drainage system.
- 2.2 When carried out on a planned basis, maintenance helps to prevent the types of failure which occur predictably within the life drainage system
- 2.3 Maintenance falls into three main categories:
 - Inspection to assess condition, report any problems and decide whether repair or other work is necessary.
 - specific tasks such as clearing debris from drainage channels, manholes, inspection chambers, catchpits, storage tanks and pipes.
 - minor repairs such as fixing loose covers and channel gratings.
- 2.4 Maintenance differs from repair which is work carried out to put right defects or damage and work to return the drainage system to a good condition on a long-term basis.

3.0 Rainwater Goods

- 3.1 Rainwater goods are to be inspected twice a year preferably in May and November.
- 3.2 Clear debris from gutters / outlets and ensure outlets are free running.
- 3.3 Inspect for cracks and leaks and repair or replace as necessary.

4.0 Slot Drainage

- 4.1 Slot drainage is to be inspected twice a year preferably in May and November for damage.
- 4.2 Slot drainage is to be cleared of vegetation and debris monthly between April and September.
- 4.3 Drainage slots and exposed edges of channels should be examined for signs of any damage resulting from stones lodged in the channel or from local impact loads. Broken channels and gratings should be replaced.
- 4.4 Grating locking system if fitted should be inspected and checked for tightness.
- 4.5 The efficiency of the sumps or should be checked by inspection. The bucket should be removed twice a year or following an intense storm and checked for blockages.
- 4.6 The inspections should be carried out in conjunction with an inspection of the underground drainage connection out of the channel system.
- 4.7 Water should be poured into the sump twice a year to check that it disperses freely.
- 4.8 Where exposed the concrete haunch to the drain should be inspected once a year for signs of damage. Both the haunch and channel should be checked for level and compared with installation drawings. Undulations of the haunch, or channel, which may impair the efficiency of the system could possibly be attributed to ground conditions and engineering advice may be necessary.
- 4.9 Levels of paved areas should be checked once a year and compared with the installation drawings. Block paving should be regularly checked for signs of lateral movement (opening or closing of joints). The side of the channel must not be laterally loaded.
- 4.10 The channels should be cleaned out carefully twice a year or following an intense storm ensuring the surface finish is not damaged. A shaped shovel (e.g. a trowel) may be used within channels.

- 4.11 On completion of cleaning operations, the channel bore should be flushed through with water and any damaged surfaces repaired. Where provided joint sealant should be repaired in accordance with the relevant manufacturer's instructions.
- 4.12 Twice a year or following an intense storm the buckets of sumps should be removed, emptied, cleaned and their drain holes cleared. Silt etc. should be removed from the bottom of the sump. Ensure that the bucket is replaced within the sump (or gully) with an easy fit.

5.0 Below Ground Drainage

- 5.1 Below ground drainage, manholes, inspection chambers, catchpit's and borehole soakaways are to be inspected twice a year preferably in May and November or after an intense storm for blockages.
- 5.2 Manholes and inspection chambers are to be opened up and checked that they are free from silt and debris and that water discharges freely to the outlets.
- 5.3 On completion of cleaning operations to the manholes and inspection chambers the underground drainage pipes should be flushed through with water to ensure that they are free from silt and debris and that water discharges freely.

6.0 Porous Block Paving

- 6.1 Porous Block Paving is to be inspected twice a year preferably in May and November.
- 6.2 Porous Block Paving is to be brushed and cleared of leaves, silt and debris in May and November.
- 6.3 After the paving is brushed and cleaned, if required additional 5mm gravel shall be applied to the joints if necessary.

7.0 Underground Storage Tanks

- 7.1 When all upstream drainage elements have been cleaned and all silt removed, underground storage tanks are to be jetted. Clean water shall be jetted into the tank and all silt shall be collected and removed from the downstream catchpit.

8.0 Summary

The following summary chart is produced for easy reference and is to be read in conjunction with the maintenance instructions above.

Maintenance Plan

Reference	Element	Maintenance Task	Frequency
3.2	Rainwater Goods	Clear debris from gutters and outlets	Twice a year
3.3	Rainwater Goods	Inspect for cracks and leaks	Twice a year
4.2	Slot Drainage	Clear vegetation and debris	Monthly April – September
4.3	Slot Drainage	Examine drainage slots and exposed edges of channel for damage	Twice a year
4.4	Slot Drainage	Examine grating locking system if fitted	Twice a year
4.5 – 4.7	Slot Drainage	Inspect sumps and buckets	Twice a year or after intense storm
4.8	Slot Drainage	Inspect concrete haunch to drain where exposed	Once a year
4.9	Slot Drainage	Inspect levels of paved areas	Once a year
4.10	Slot Drainage	Clean channels	Twice a year or after intense storm
4.11	Slot Drainage	Flush channel with water	Twice a year or after intense storm
4.12	Slot Drainage	Clean sump buckets	Twice a year or after intense storm
5.1	Below Ground Drainage	Inspect for blockages	Twice a year or after intense storm
5.2	Below Ground Drainage	Remove silt and debris from manholes and inspection chambers	Twice a year or after intense storm
5.3	Below Ground Drainage	Flush underground pipes with water	Twice a year or after intense storm
6.2	Porous Block Paving	Brush and clear leaves, silt and debris	Twice a year or after intense storm
6.3	Porous Block Paving	Reapply 5mm gravel to joints if required	Twice a year or after intense storm
6.0	Storage Tanks	Flush tank with water and remove silt	Twice a year or after intense storm